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ABSTRACT

The Maryland State Board for Community Colleges designed a project to develop outcome measures for continuing education and to conduct a survey of vocational-technical continuing education students at Maryland community colleges. Five types of outcomes were identified for inclusion in a performance profile for college programs: student pass rate on selected certification examinations, employer satisfaction with business and industry training courses, completion rates of students enrolled in courses with completion requirements, student ratings of the quality of instruction, and student indication of goal achievement. In the process of developing specific measures for these outcomes, a statewide survey of continuing education students was conducted. Selected findings included the following: (1) in fiscal year 1987, 144,081 students took over 6,991 state-supported continuing education courses at Maryland community colleges; (2) 91% of the students said that they had completed all course requirements; (3) 89% rated instruction as "good" or "very good" and said that they would recommend the courses to others; and (4) nearly 75% indicated that they had achieved their goals. Attached to the final project report are "Continuing Education Outcomes," a description of the outcome measures selected for performance profiles for apprenticeship training, licensure/certification, and business and industry training; and "Continuing Education Student Follow-Up Report," which includes a profile of continuing education students, information on course completion and goal achievement, and student ratings of instruction and program administration. The questionnaire is attached. (AACZ)

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CONTINUING EDUCATION OUTCOME MEASURES PROJECT

MARYLAND COMMUNITY COLLEGES

FINAL REPORT

FISCAL YEAR 1988

DIRECTED BY: Maryland State Board for Community Colleges
FUNDING GRANTED BY: Division of Vocational-Technical Education
Maryland State Department of Education
PROJECT DIRECTOR: Hercules Pinkney

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September 1988

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- o Continuing Education Outcomes
- o Continuing Education Student Follow-Up Report

CONTINUING EDUCATION OUTCOME MEASURES PROJECT

PROJECT TITLE

Continuing Education Outcome Measures Project
Activity No. 3.II.1.5.2

PROJECT PROPOSAL

The Maryland State Board for Community Colleges (SBCC) developed a project proposal and requested funds from the Division of Vocational-Technical Education (DVTE), Maryland State Department of Education, to develop outcome measures and to conduct a survey of vocational-technical continuing education students at Maryland community colleges. Grant funds enabled the Board to determine the feasibility of surveying specified employers and selected licensure/certification agencies.

PURPOSE

The project was intended to provide the SBCC with the resources necessary to develop outcome measures and to survey continuing education students of the seventeen community colleges. A survey was designed to provide responses to the outcome measures and to provide information to the colleges for self-improvement. This grant project also was intended to demonstrate institutional accountability as it relates to vocational-technical continuing education offerings.

BACKGROUND

Assessing student achievement and institutional effectiveness in higher education has gained national attention over the past five years. However, efforts to measure and demonstrate student outcomes have been concentrated on credit programs.

During fiscal year 1986, the SBCC in conjunction with community college personnel developed a concise summary of information about credit student outcomes called the Performance Profile. There were two central reasons for the development of the Performance Profile that are applicable to continuing education. First, it is sound educational practice to have a systematic method for reviewing institutional achievements; and second, there is a growing public concern about the quality of our educational system which needs to be addressed with demonstrations of educational accountability.

Using student outcomes to establish accountability and to measure the effectiveness of programs and colleges is not new to Maryland community colleges. For many years the community colleges and the State Board for Community Colleges have participated in a Program Data Monitoring System (PDMS). Surveys of students taking continuing education courses also have been conducted by the community colleges and the State Board. However,

these surveys have not previously been incorporated into a systematic evaluation system. Heretofore, outcome measures that demonstrate accountability and assist in the evaluation of the effectiveness of noncredit instruction have not existed.

The SBCC assigned staff and appointed an advisory group of continuing education deans and institutional research directors from the community colleges to an outcomes committee to develop a set of student outcome measures for continuing education. The committee met regularly over a two-year period. Current data sources and reports concerning continuing education were reviewed and further refinements to the SBCC continuing education data systems were suggested.

The committee recommended the development of an annual continuing education technical report that would provide the colleges with trend data on enrollment, course subjects, course intent, and special populations. The committee also reviewed course evaluation forms currently being used by the colleges and developed the 1988 survey of continuing education students.

RESULTS

Two publications resulted from the Continuing Education Outcome Measures Project:

Continuing Education Outcomes

Continuing Education Student Follow-Up Report

These publications are submitted as attachments to this report.

The publication *Continuing Education Outcomes* describes two years of effort to develop outcome measures for noncredit continuing education in Maryland community colleges. The following five areas were identified for the continued development of outcome measures that could be used in a performance profile for each college:

- o Student pass rate on selected certification examinations
- o Employer satisfaction with business and industry training courses
- o Completion rates of students enrolled in courses with completion requirements
- o Student rating of the the quality of instruction
- o Student indication of goal achievement

In the process of developing outcome measures, a statewide survey of continuing education students was conducted. Following is a summary of the results of that survey. More complete results and a description of the study's methodology are reported in the publication *Continuing Education Student Follow-Up Report*.

SUMMARY

In fiscal year 1987, there were 144,081 students in over 6,991 State supported continuing education courses offered by the Maryland public community colleges. Enrollment in these courses has increased dramatically in the past five years.

During the development of an outcomes accountability system for these continuing education courses, the seventeen public community colleges in Maryland and the State Board for Community Colleges reviewed the current student information system, identified other information sources concerned with apprenticeship training, licensing and certification, and conducted a sample survey of continuing education students. Results from this study indicate that noncredit courses are an important part of the social and economic life of the State and local community of the individual colleges.

Approximately 91 percent of the students surveyed said they completed requirements of noncredit courses. About 89 percent of the respondents said instruction was good or very good and that they would recommend the courses to others. Almost three-fourths of the respondents said they achieved their goals of preparing for a career, updating skills, self-enrichment, and a variety of other goals.

It also was learned that the involvement of community colleges in apprenticeship training has made an invaluable contribution to Maryland's economic growth and development. Almost all of the State funded related instruction in apprenticeship training is provided by community colleges.

The study revealed that community colleges play an essential role in helping students maintain their current licenses or certification. Additionally, the colleges serve the important function of training students for first-time qualifying examinations.

One critically important factor in a healthy economic environment is the availability of a skilled workforce. The number of workers and employers taking advantage of the community college business and industry noncredit courses is indicative of the quality of these offerings and the role they play as an important source of training. Every college has made an effort to respond to the economic needs of its community by offering a wide range of courses in the business and industry area.

A framework has now been established to use student survey data as well as other sources of data to construct a reliable and useful performance profile for continuing education.

CONTINUING EDUCATION

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September 1988

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PREFACE

Assessing student achievement and institutional effectiveness in higher education has gained national attention over the past five years. However, these major efforts have been concentrated on credit programs and student services to demonstrate educational accountability. Heretofore, outcome measures that demonstrate accountability and assist in the evaluation of the effectiveness of noncredit instruction have not existed.

This report describes two years of effort to develop outcome measures for noncredit continuing education in Maryland community colleges. A framework has now been established to use student survey data as well as other noncredit data to construct a reliable and useful performance profile for continuing education.

In the process of developing outcome measures, considerable information emerged regarding the positive impact of continuing education instruction on the social and economic life of the State. Therefore, the report also documents the quality of instruction and administration prevalent in Maryland community colleges.

ACKNOWLEDGEMENTS

The advice and invaluable assistance of the Continuing Education Outcomes Committee during the two years of work that culminated in the preparation of this report is very much appreciated. The Committee was comprised of representatives of the Deans and Directors of Continuing Education and Directors of Institutional Research of the Maryland community colleges.

Committee members were:

Charlotte Bartels	Patricia Haeuser
Michael Chase	David Hemenway
Craig Claggett	Veronica Norwood
Nancy Colmer	Carolyn Smith

Also, Dorothy Linthicum, consultant, organized the information collected, analyzed student survey data, and compiled the final report. Additionally, Maxine J. Pope of the State Board staff edited and prepared the manuscript. Special thanks are in order to Hercules Pinkney and Daniel McConochie of the State Board staff for providing the overall guidance and coordination of this statewide endeavor. Also, thanks to Maureen Jackson, State Board programmer/analyst, for her training of personnel and supervising the data entry associated with this effort.

The State Board for Community Colleges also is grateful to the Division of Vocational-Technical Education of the Maryland State Department of Education for grant funding support of the final phase of the Outcomes Project.

James D. Tschechtelin
Executive Director

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EXECUTIVE SUMMARY

In fiscal year 1987, there were 144,081 students in over 6,991 State supported continuing education courses offered by the Maryland public community colleges. Enrollment in these courses has increased dramatically in the past five years.

During the development of an outcomes accountability system for these continuing education courses, the seventeen public community colleges in Maryland and the State Board for Community Colleges reviewed the current student information system, identified other information sources concerned with apprenticeship training, licensing and certification, and conducted a sample survey of continuing education students. Results from this study indicate that noncredit courses are an important part of the social and economic life of the State and local community of the individual colleges.

Approximately 91 percent of the students surveyed said they completed requirements of noncredit courses. About 89 percent of the respondents said instruction was good or very good and that they would recommend the courses to others. Almost three-fourths of the respondents said they achieved their goals of preparing for a career, updating skills, self-enrichment, and a variety of other goals.

It also was learned that the involvement of community colleges in apprenticeship training has made an invaluable contribution to Maryland's economic growth and development. Almost all of the State funded related instruction in apprenticeship training is provided by community colleges.

The study revealed that community colleges play an essential role in helping students maintain their current licenses or certification. Additionally, the colleges serve the important function of training students for first-time qualifying examinations.

Using student outcomes to establish accountability and to measure the effectiveness of programs and colleges is not new to Maryland community colleges. For many years the community colleges and the State Board for Community Colleges (SBCC) have participated in a Program Data Monitoring System (PDMS). The SBCC produces a performance profile that uses information from surveys of students and employers to evaluate the credit programs at each college.

Surveys of students taking continuing education courses also have been conducted by the community colleges and the State Board for Community Colleges. However, these surveys have not previously been incorporated into a systematic evaluation system.

The SBCC assigned staff and appointed an advisory group of continuing education deans and institutional research directors from the community colleges to an outcomes committee to develop a set of student outcome measures for continuing education. The committee met regularly over a two-year period. They reviewed current data sources and reports concerning continuing education and suggested further refinements to the State Board for Community Colleges continuing education data systems. The committee recommended the development of an annual continuing education technical report which would provide the colleges trend data on enrollment, course subjects, course intent, and special populations. The committee also reviewed course evaluation forms currently being used by the colleges and developed the 1988 survey of continuing education students.

This report describes the results of the committee's efforts to develop a reporting mechanism for student outcomes in continuing education. Results of the student follow-up survey are reported along with data from other data sources concerned with apprenticeship training, licensure/certification, and business and industry training.

The report recommends ways that information concerning student outcomes can be improved and used to support the evaluation and planning procedures of the colleges. The committee recommended the continued development and use of student surveys and other data sources to construct a performance profile for continuing education. The following five outcome areas were identified for the continued development of outcome measures which could be used in a performance profile for each college:

1. Student pass rates on selected certification examinations
2. Employer satisfaction with business and industry training courses
3. Completion rates of students enrolled in courses with completion requirements
4. Student rating of the quality of instruction
5. Student indication of goal achievement

The purpose of this profile of student outcomes, like the purpose of this report, is to demonstrate the accountability of the continuing education system in Maryland and to provide tools for the evaluation and continued improvement of that system.

INTRODUCTION

Using student outcomes to establish accountability and to measure the effectiveness of programs and colleges is not new to Maryland community colleges. For many years the community colleges and the State Board for Community Colleges (SBCC) have participated in a Program Data Monitoring System (PDMS) and have produced a student Performance Profile that uses annual surveys of students, employers, and transfer information, to evaluate the credit programs at each college.

Surveys of students taking continuing education courses also have been conducted by the community colleges and the State Board for Community Colleges. However, the survey data previously have not been incorporated into a systematic evaluation system. This report is the first step in the process of implementing an accountability tool for continuing education. A description of continuing education in Maryland community colleges is contained in Appendix A.

PURPOSE

The original intent of the study was to develop outcome measures that would demonstrate accountability and help the colleges evaluate noncredit continuing education. However, as information about outcomes was collected, other findings about continuing education emerged. The purpose of this report is to describe the measures selected for the continuing education performance profile and to report the additional findings that emerged in conjunction with the development of those measures.

Four outcome areas were proposed for study: course completion, quality of instruction, quality of administration, and student goal achievement. These outcomes were reviewed from the perspective of students, apprenticeship training, licensure/certification, and business/industry training. Information related to these perspectives came from a student follow-up survey, from interviews, and from apprenticeship training, licensure/certification, and business and industry training data.

PROCESS

In 1986, the SBCC assigned staff and appointed an advisory group of continuing education deans and institutional research directors from the community colleges to an outcomes committee to develop a set of outcome measures for continuing education, similar to those developed for evaluating student outcomes in credit courses. The committee met regularly over a two-year period. The committee reviewed current data sources and reports

concerning continuing education and suggested refinements to the State Board for Community Colleges current continuing education data systems.

In addition, the committee provided guidance on the development of an annual continuing education technical report which would provide the colleges with trend data on enrollment, course subjects, course intent, and special populations. Finally, the committee reviewed course evaluation forms being used by the colleges, assisted in the development of the 1988 survey of continuing education students, and provided invaluable advice on the analysis and reporting of the information that was collected.

Funding from the Division of Vocational-Technical Education, Maryland State Department of Education, was obtained to support the activities of the committee. A consultant was hired in March 1988 to assist the committee in organizing the information collected, to analyze data from the student survey, and to compile the final report.

METHODOLOGY

Information about continuing education was collected and organized from four perspectives:

- Students
- Apprenticeship Training
- Licensure/Certification
- Business and Industry

A description of how data were collected for each perspective is provided below:

- o Students. A questionnaire was designed to obtain information from the viewpoint of the students. The colleges mailed the questionnaire in January 1988 to a sample of students enrolled in State funded continuing education courses during fiscal year 1987. (See Appendix B for a copy of the questionnaire.)

More detailed information about the methodology and results of the student survey can be found in a separate SBCC document entitled Continuing Education Student Follow-Up Report.

The adjusted response rate for this survey was 40 percent, comparable to other student surveys administered by the SBCC. Table 1 shows the response rate by college and the total number of responses for this student survey.

At each college, 20 percent of the students enrolled in work-related courses and 10 percent of the students in other courses were randomly selected to participate in the survey. This stratified sampling technique was used to ensure an adequate number of respondents in each category at each college. In the analyses, the responses from these two groups were coded to ensure their proper "weight" in the survey analyses.

Table 1
RESPONSE RATES

College	Sample	Nondeliverable	Total Responses	Unadjusted Response Rate	Adjusted Response Rate
Allegany	799	4	198	25%	25%
Anne Arundel	2,902	388	1,220	42	49
Baltimore	1,610	249	325	20	24
Catonsville	2,698	129	909	34	35
Cecil	289	26	107	37	41
Charles	648	9	289	45	45
Chesapeake	487	23	216	44	47
Dundalk	1,110	109	408	37	41
Essex	2,594	171	894	35	37
Frederick	500	16	150	30	31
Garrett	379	10	172	45	47
Hagerstown	670	225	292	44	66
Harford	1,046	31	439	42	43
Howard	1,234	62	533	43	46
Montgomery	1,443	239	492	34	41
Prince George's	2,550	195	1,017	40	43
Wor-Wic Tech	549	39	218	40	43
Statewide	21,508	1,925	7,879	37%	40%

An initial finding in the sample was that certain noncredit courses lend themselves better to outcome measures. In work-related courses, for example, student goals are usually better defined and courses often lead to an outcome that can be measured, such as licensure or job promotion. In this report, work-related courses are those courses identified by the colleges as vocational/technical, business and industry, apprenticeship training, or certification/licensure.

In fiscal year 1987, 63 percent of the 6,991 approved courses offered at the seventeen community colleges were categorized as work-related courses. These courses generated 46 percent of the State funded full-time equivalent students (FTEs) in continuing education.

In developing the outcome measures, a special focus therefore was given to work-related courses and to the students who attended these courses. The sample was selected to ensure there would be an adequate number of students in work-related courses at each college and several questions dealt directly with the connection between the course, student job-related goals, and student's job.

A comparison of work-related and general groups from the weighted sample and from these groups in the actual population of students is shown in Table 2. In general, the proportion of responses in these two groups (work-related and general) appears to be closely related to the proportion of all students in these types of courses. Statewide, students in the general courses were slightly more inclined to respond. At several colleges, the population in the work-related courses are somewhat more underrepresented among the survey respondents.

Table 2
COMPARISON OF POPULATION AND WEIGHTED RESPONSES

College	Population				Weighted Responses			
	Work-Related		General		Work-Related		General	
	#	%	#	%	#	%	#	%
Allegany	3,219	67%	1,554	33%	154	64%	88	36%
Anne Arundel	11,283	64	6,454	36	865	55	710	45
Baltimore	3,566	27	9,506	73	164	34	316	66
Catonsville	8,508	45	9,536	55	519	40	780	60
Cecil	623	27	1,650	73	55	35	104	65
Charles	2,417	59	1,665	41	212	58	154	42
Chesapeake	1,580	48	1,709	52	148	52	136	48
Dundalk	2,898	35	5,140	65	176	28	464	72
Essex	9,974	63	5,883	37	636	56	500	44
Frederick	1,300	45	1,586	55	98	49	104	51
Garrett	1,513	66	779	34	144	72	56	28
Hagerstown	2,393	59	1,636	41	200	52	184	48
Harford	2,641	34	5,262	66	267	44	340	56
Howard	4,319	54	3,729	46	321	43	424	57
Montgomery	4,659	48	5,066	52	314	47	350	53
Prince George's	8,599	50	8,547	50	564	38	906	62
Wor-Wic Tech	2,619	91	250	9	206	90	24	10
Statewide	72,111	50%	69,952	50%	5,043	47%	5,640	53%

Work-related. Students enrolled in vocational/technical, business/industry, licensure/certification, and apprenticeship courses.

General. Students enrolled in continuing education courses without a specific course intent of preparing students for employment.

Note: In later analysis, the work-related and general respondents were broken down into respondents over 60 years of age and those under 60 years.

- o Apprenticeship Training. Data on apprenticeship training at community colleges were available from continuing education files at the SBCC. This information was used with data and information provided through interviews with staff of the Maryland Apprenticeship and Training Council (MATC) and the Department of Economic and Employment Development. The MATC provided information about current training and program changes being contemplated and provided data about sponsors, courses, and apprentices.
- o Licensure/Certification. The committee identified ten major occupational areas in which community colleges provide training for eventual licensure or certification. Representatives from the colleges involved in each of these occupational areas were interviewed. Information about the kinds of training offered by the colleges, the evaluation systems used, and the feedback provided from licensing agencies was collected. Three agencies granting licensure and certification were contacted for additional information. Enrollment data in the licensure/certification area were provided from the SBCC continuing education files.
- o Business and Industry. Enrollment data in vocational/technical and business/industry courses were provided from the SBCC continuing education files. Information about the number of registrants and businesses served by business and industry courses was provided by each college. Many colleges had no internal mechanism for collecting and reporting this type of data as a distinct category and therefore provided estimates. Many colleges also had to estimate the number of registrants and businesses served through open enrollment and contract courses.

RESULTS

This chapter reports the data collected from each of the four perspectives described in the Introduction. Much of the information came from interviews and from the SBCC continuing education data files.

STUDENTS

Information about continuing education students used in this report came from two sources: the SBCC continuing education data base and the continuing education survey administered in January 1988. The data base was used to describe the continuing education population for fiscal 1987. The survey data were used to describe the employment and educational status of continuing education students and their responses to questions about attendance, quality of instruction, quality of administration, and goal achievement.

The sample population from the student survey was divided into three groups representing age and course intent. As explained in the previous chapter, a special focus was given to work-related courses because they lend themselves well to particular outcome measures. Seniors were reviewed separately because of differences between the content of senior course offerings and other noncredit courses. There also were major differences in the goals of senior and non-senior students. The three groups analyzed in the study were:

- o **Work-related.** Students under 60 years of age enrolled in vocational/technical, business/industry, licensure/certification, and apprenticeship courses (41 percent).
- o **General.** Students under 60 enrolled in non-vocational continuing education courses (17 percent).
- o **Seniors.** Students aged 60 and above enrolled in continuing education courses (42 percent).

A. Student Characteristics

The number of students who enrolled in noncredit continuing education courses in fiscal year 1987 was 144,081, up 13 percent from fiscal year 1986. The number of equated full-time equivalent (FTE) students in continuing education in fiscal 1987 was 18,903. About 30 percent of the community colleges' total credit and noncredit FTEs in fiscal 1987 came from continuing education.

The average age of continuing education students in fiscal 1987 was 46 years. (Table 3) Sixty percent of the continuing education students were female, compared with 63 percent of the students enrolled in community college credit programs. Twenty-two percent of the continuing education students were from minority groups.

Table 3
DEMOGRAPHIC CHARACTERISTICS OF STUDENTS
IN STATE FUNDED CONTINUING EDUCATION COURSES

<u>College</u>	<u>Total Unduplicated Students</u>	<u>Percent Female</u>	<u>Percent Minority</u>	<u>Mean Age</u>
Allegany	4,773	61%	1%	43
Anne Arundel	17,737	60	13	42
Baltimore	13,072	66	54	53
Catonsville	19,343	58	25	51
Cecil	2,273	65	12	37
Charles	4,086	61	17	37
Chesapeake	3,289	69	18	51
Dundalk	8,791	51	22	56
Essex	15,859	69	12	48
Frederick	2,886	59	8	34
Garrett	2,281	50	2	40
Hagerstown	4,029	45	10	41
Harford	7,882	47	18	38
Howard	8,047	61	18	38
Montgomery	9,725	66	NA	48
Prince George's	17,139	61	47	46
Wor-Wic Tech	2,869	52	17	37
Statewide	144,081	60%	22%	46

The proportion of seniors enrolled in noncredit courses continues to increase significantly across the State. By college, the proportion of students aged 60 and above in fiscal 1987 ranged from 3 percent to 51 percent. Table 4 shows the proportion of seniors at each college and the proportion of students under age 60 taking work-related noncredit courses or general noncredit courses.

Table 4
DESCRIPTION OF CONTINUING EDUCATION POPULATION
BY AGE AND COURSE INTENT

College	Work-Related (under 60)		General (under 60)		Seniors (over 60)		TOTAL
	#	%	#	%	#	%	
Allegany	3,041	64%	646	14%	1,086	23%	4,773
Anne Arundel	10,285	58	3,910	22	3,542	20	17,737
Baltimore	2,531	20	3,882	30	6,552	51	12,965
Catonsville	7,741	43	3,450	19	6,778	38	17,969
Cecil	596	26	1,226	54	451	20	2,273
Charles	2,332	57	1,241	30	513	13	4,086
Chesapeake	1,284	39	621	19	1,384	42	3,289
Dundalk	2,241	28	2,010	25	3,787	47	8,038
Essex	9,320	59	1,552	10	4,985	31	15,857
Frederick	1,242	43	1,550	54	94	3	2,886
Garrett	1,457	64	506	22	328	14	2,291
Hagerstown	2,301	57	962	24	766	19	4,029
Harford	2,428	31	4,340	55	1,091	14	7,859
Howard	4,178	52	3,054	38	815	10	8,047
Montgomery	4,067	48	1,438	17	3,035	36	8,540
Prince George's	8,159	48	3,147	18	5,840	34	17,146
Wor-Wic Tech	2,420	84	215	7	234	8	2,869
Statewide	65,623	47%	33,750	24%	41,281	29%	140,654

Note: Missing data total 3,427 students who could not be accurately categorized into one of the three population groups.

Twenty-nine percent of the students in the work-related group had some college education, while 25 percent of the students in the general courses had some college. The percent of seniors with some college was 23 percent. (Table 5)

Table 5
EDUCATIONAL STATUS
BY COURSE TYPE AND AGE

Status	Work-Related WN = 4,210	General Courses WN = 1,778	Senior Courses WN = 3,826
Less than high school	4%	19%	17%
High school	25	23	33
Some college	29	25	23
Associate degree	10	7	4
Bachelor's degree	20	15	13
Master's degree	10	10	9
Doctorate	2	1	1

WN - weighted number of respondents.

Seventy-five percent of the work-related respondents were employed full-time while they were enrolled in continuing education courses. Fifty percent of the general respondents were employed full-time. Eighty-one percent of the seniors indicated they were retired. (Table 6)

Table 6
EMPLOYMENT STATUS
BY COURSE TYPE AND AGE

Status	Work-Related WN = 4,241	General Courses WN = 1,796	Senior Courses WN = 4,138
Employed full-time	75%	50%	6%
Employed part-time	10	11	4
Unemployed seeking work	5	13	-
Unemployed not seeking work	4	10	2
Retired	1	2	81
Other	5	14	7

WN = weighted number of respondents.

B. Completion Rates

Course, program, and degree completions are important outcome measures in college credit programs because such completions are often tied directly to the student's ability to take more advanced courses, enter certain jobs, and gain promotions, among others.

In the noncredit area, completion of each course may not be as directly tied to the ability to take more advanced courses but is often related to job skills, advancement opportunities, and a personal sense of accomplishment. Completion rates of continuing education students were measured in two ways: attendance and completion of course requirements.

Two-thirds of all students reported that they attended all sessions of the course. Work-related students under 60 years old were more likely to attend all sessions (82 percent). (Table 7)

Table 7
ATTENDANCE
ALL STUDENTS

<u>Group</u>	<u>No Sessions</u>	<u>One Session</u>	<u>Some Sessions</u>	<u>All Sessions</u>
Work-related (under 60)	2%	3%	14%	82%
General (under 60)	3	2	26	69
Seniors (over 60)	4	2	43	50
All Students	3%	2%	28%	67%

Table 8 shows student-reported attendance in continuing education courses of all students under 60 years of age by college. Senior data were deleted since the course content differs and other factors impact on course attendance. By college, attendance at all sessions ranged from 68 percent to 87 percent. Lack of transportation may be one reason for lower attendance rates at the more rural colleges.

Table 8
ATTENDANCE
STUDENTS UNDER AGE 60

<u>College</u>	<u>No Sessions</u>	<u>One Session</u>	<u>Some Sessions</u>	<u>All Sessions</u>
Allegany	4%	7%	13%	76%
Anne Arundel	3	2	14	81
Baltimore	-	3	24	74
Catonsville	2	2	17	80
Cecil	3	3	18	77
Charles	4	2	23	71
Chesapeake	4	5	23	68
Dundalk	4	3	14	79
Essex	-	2	11	87
Frederick	2	2	17	79
Garrett	1	3	17	80
Hagerstown	1	-	18	81
Harford	1	3	28	68
Howard	2	2	27	68
Montgomery	3	3	17	77
Prince George's	3	3	13	82
Wor-Wic Tech	3	2	18	78
Statewide	2%	3%	17%	78%

Students were asked if they were able to complete the requirements of their noncredit courses. About 38 percent of the respondents said the question was not applicable to their course. Of those who took a noncredit course with course completion requirements, 91 percent reported they had completed the requirements. (Table 9) Work-related students were more likely to complete course requirements than other students.

Table 9
COMPLETION OF COURSE REQUIREMENTS

<u>Group</u>	<u>Yes</u>	<u>No</u>
Work-related (under 60)	95%	5%
General (under 60)	86	14
Seniors (over 60)	88	12
All Students	91%	9%

Table 10 shows completion of course requirements for students under 60 years of age. The statewide average for completion was 92 percent, indicating that almost all students are able to complete the requirements in continuing education courses.

Students with no college education were less likely to complete requirements than students with some higher education. With the exception of Garrett, colleges with primary responsibility for adult basic education programs in their political subdivision (Baltimore, Cecil, Harford, and Howard) were more likely to have a larger percentage of students not completing course requirements. These colleges, through their adult basic education programs, served more students who were "at risk" in their secondary school programs, who had previously been high school dropouts, and who came to the college without a high school diploma.

Table 10
COMPLETION OF COURSE REQUIREMENTS
STUDENTS UNDER AGE 60

<u>College</u>	<u>Yes</u>	<u>No</u>
Allegany	96%	4%
Anne Arundel	95	5
Baltimore	76	25
Catonsville	93	7
Cecil	88	12
Charles	92	8
Chesapeake	92	8
Dundalk	90	10
Essex	95	5
Frederick	94	6
Garrett	95	5
Hagerstown	96	4
Harford	79	21
Howard	89	11
Montgomery	96	4
Prince George's	94	6
Wor-Wic Tech	94	6
Statewide	92%	8%

C. Quality of Instruction

Student satisfaction with the quality of instruction they received in the continuing education course was considered an important outcome of the course. To measure this outcome, respondents were asked to rate the quality of instruction in their course and whether they would recommend the course to others with the same goal.

Eighty-nine percent of all respondents felt the instruction in their course has been good or very good. Only 3 percent felt that the instruction had been poor or very poor. (Table 11) Seniors were the most positive about the quality of instruction received in their continuing education course.

Table 11
RATING OF INSTRUCTION
ALL STUDENTS

<u>Group</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Work-related (under 60)	46%	39%	11%	3%	1%
General (under 60)	55	31	10	3	1
Seniors (over 60)	71	23	5	1	-
All Students	58%	31%	8%	2%	1%

Eleven percent of the work-related group rated instruction fair, and 4 percent indicated instruction was poor or very poor. Students who completed course requirements were more likely to rate instruction good or very good; students with poorer attendance were more likely to rate instruction lower.

Eighty-nine percent of all respondents under 60 years of age rated instruction very good or good. Only 4 percent rated instruction poor or very poor.

One student wrote on his survey form, "I think [the community college] has great instructors giving the community a wide range of courses to better their skills." Another said, "I can only say teachers were friendly, patient and thorough." A student at another college added, "It was very helpful to have a teacher who could relate his own work experiences to the subject he taught." A small minority of respondents cautioned their college about selecting instructors and the need to monitor teaching performance. There were few differences between colleges on this outcome measure. (Table 12)

Table 12

RATING OF INSTRUCTION
STUDENTS UNDER AGE 60

College	Very Good	Good	Fair	Poor	Very Poor
Allegany	54%	38%	4%	3%	-
Anne Arundel	51	36	10	2	1%
Baltimore	52	33	10	5	-
Catonsville	53	34	11	2	-
Cecil	62	27	6	3	2
Charles	48	35	13	2	3
Chesapeake	46	35	15	2	3
Dundalk	46	39	11	3	-
Essex	45	44	9	2	-
Frederick	52	33	12	1	1
Garrett	55	38	6	1	-
Hagerstown	53	37	7	2	2
Harford	52	31	13	3	2
Howard	44	34	13	7	2
Montgomery	46	37	14	3	1
Prince George's	46	39	11	3	1
Wor-Wic Tech	48	40	6	3	4
Statewide	49%	36%	11%	3%	1%

The second indicator of the quality of instruction is a student's willingness to recommend a continuing education course to someone else who has similar goals. Eighty-nine percent of the total respondents indicated they would recommend their continuing education course to others with the same goal. Seniors were the most likely to recommend their course. (Table 13)

Table 13
WOULD RECOMMEND COURSE
ALL STUDENTS

<u>Group</u>	<u>Yes</u>	<u>No</u>	<u>Not Sure</u>
Work-related (under 60)	87%	6%	8%
General (under 60)	85	8	8
Seniors (over 60)	95	2	4
All Students	89%	5%	6%

Table 14 shows the percentage of students under age 60 at each college who would recommend their continuing education course to others. Positive responses among colleges range from 78 percent to 96 percent.

Table 14
WOULD RECOMMEND COURSE
STUDENTS UNDER AGE 60

<u>College</u>	<u>Yes</u>	<u>No</u>	<u>Not Sure</u>
Allegany	90%	5%	5%
Anne Arundel	85	7	8
Baltimore	89	3	8
Catonsville	86	5	9
Cecil	86	1	13
Charles	84	9	8
Chesapeake	84	3	13
Dundalk	84	6	10
Essex	91	2	7
Frederick	88	6	6
Garrett	96	1	3
Hagerstown	92	2	6
Harford	86	7	8
Howard	78	15	6
Montgomery	83	8	9
Prince George's	86	7	8
Wor-Wic Tech	85	9	6
Statewide	86%	6%	8%

D. Quality of Administration

Most students (93 percent) taking noncredit courses at community colleges rated the registration and payment procedures either good or very good. (Table 15) Only 2 percent said the procedures were poor or very poor.

Table 15

QUALITY OF ADMINISTRATION
ALL STUDENTS

<u>Group</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Work-related (under 60)	48%	42%	8%	1%	1%
General (under 60)	49	42	7	1	1
Seniors (over 60)	67	29	4	-	-
All Students	55%	37%	6%	1%	1%

Respondents who rated the administrative procedures as poor wrote comments in the margins of the survey explaining their criticism. Problems mentioned included transportation, parking, registration, scheduling, and payment procedures.

Table 16 shows ratings of these administrative procedures by college. Among colleges, the percentage of students who said administrative procedures were good or very good ranged from 84 percent to 95 percent.

Table 16
QUALITY OF ADMINISTRATION
STUDENTS UNDER AGE 60

<u>College</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Allegany	51%	44%	5%	1%	-
Anne Arundel	53	40	5	1	1%
Baltimore	54	30	14	2	-
Catonsville	48	39	10	2	1
Cecil	56	38	5	2	-
Charles	47	44	7	1	2
Chesapeake	47	47	5	-	2
Dundalk	54	35	11	-	-
Essex	47	45	8	1	-
Frederick	48	41	9	2	-
Garrett	59	34	7	-	-
Hagerstown	46	47	6	1	1
Harford	53	38	7	2	-
Howard	43	46	9	2	-
Montgomery	43	46	9	1	1
Prince George's	45	44	9	1	1
Wor-Wic Tech	46	48	4	-	2
Statewide	49%	42%	8%	1%	1%

E. Student Goal Achievement

Student goal achievement is clearly an important student outcome. Students were asked their primary goal and if they were able to achieve their goal. Most of the work-related students said their goal was to update skills. (Table 17) Seniors and the general group were more likely to have taken courses for self-enrichment.

Table 17

STUDENT GOALS ALL STUDENTS

<u>Group</u>	<u>Preparation for First Career</u>	<u>Preparation for Different Career</u>	<u>Update Skills</u>	<u>Self- Enrichment</u>	<u>Other</u>
Work-related (under 60)	4%	13%	51%	22%	10%
General (under 60)	8	11	17	46	18
Seniors (over 60)	-	2	4	74	21
All Students	3%	8%	26%	48%	15%

Seventy-two percent of the total respondents said the course had helped them achieve their goal. Table 18 shows the percentage of students who indicated they had completed or mostly completed their goal.

Table 18

GOAL ACHIEVEMENT
BY TYPE OF GOAL
ALL STUDENTS

<u>Group</u>	<u>Preparation for First Career</u>	<u>Preparation for Different Career</u>	<u>Update Skills</u>	<u>Self- Enrichment</u>	<u>Other</u>	<u>All Goals</u>
Work-related (under 60)	67%	62%	69%	62%	72%	67%
General (under 60)	78	61	68	66	64	66
Seniors (over 60)	50	65	68	83	79	81
All Students	71%	62%	69%	76%	74%	72%

Statewide, 67 percent of the students under age 60 had completed or mostly completed their goals. Statewide, only 12 percent reported that the course had helped them achieve only "a little" of their goal or had achieved none of their goal. (Table 19)

Table 19
GOAL ACHIEVEMENT
STUDENTS UNDER AGE 60

<u>College</u>	<u>Completed</u>	<u>Mostly Completed</u>	<u>Fair</u>	<u>Little</u>	<u>None</u>
Allegany	32%	37%	24%	4%	3%
Anne Arundel	36	31	22	8	3
Baltimore	32	30	30	6	3
Catonsville	36	30	23	9	2
Cecil	35	44	9	6	6
Charles	38	31	16	11	4
Chesapeake	27	36	21	14	3
Dundalk	32	28	27	10	3
Essex	38	33	22	6	2
Frederick	41	35	13	8	2
Garrett	51	27	17	5	-
Hagerstown	33	39	19	7	2
Harford	41	20	22	14	4
Howard	26	35	21	13	5
Montgomery	33	25	28	11	3
Prince George's	36	30	20	11	3
Wor-Wic Tech	38	24	24	11	3
Statewide	36%	31%	21%	9%	3%

APPRENTICESHIP TRAINING

The involvement of community colleges in apprenticeship training has grown phenomenally during the past few years. The program, which is partially funded with tax dollars, originated in the Division of Vocational-Technical Education of the Maryland State Department of Education and is now a part of the Maryland Department of Economic and Employment Development (DEED). The funding of apprenticeship courses and the current data collection system is currently being reviewed by the DEED, the Maryland Apprenticeship and Training Council (MATC), the SBCC, and the community colleges.

Apprenticeships involve on-the-job training and related instruction. On-the-job training is conducted over a one- to four-year period at the job site. The related instruction is available at the community college or an off-campus location. Each student must acquire at least 144 hours of related instruction per year to qualify for apprenticeship status. Most programs average about 180 hours per year, while some may reach 300 hours.

Continuing education is particularly adaptable to apprenticeship training because of the flexibility in starting up courses and providing specific curricula. In many trades, curriculum materials are developed by national organizations to fulfill standardized requirements and to include the latest technology. The related-instruction however is identified with the community college and the quality it represents. Instructors often are recommended by the trade or occupational sponsor for which apprenticeship training is to be provided. These instructors provide the requisite skills and knowledge to make the training relevant and up-to-date.

Apprenticeship training allows community colleges to serve the businesses in their communities since many of the sponsors are local trade associations or unions. Small businesses requiring skilled technicians depend on this outside training. Trades and occupations being served by apprenticeship training at community colleges include plumber, electrician, cabinet maker, construction worker, air conditioning technician, among others. Sponsors represent a variety of large businesses, trade associations, unions, and public employers.

In fiscal year 1987, about 85 percent of the apprentices who were involved in training funded by the Maryland Apprenticeship and Training Council attended community colleges for their related instruction. Other programs are available through public schools and the University of Maryland. Participation in apprenticeship training varies widely among the colleges. Fiscal year 1987 enrollments ranged from 1,122 at Catonsville to 85 at Frederick. The only colleges not participating in the program through continuing education are Garrett and Cecil where the apprenticeship related courses are offered through credit courses. (Table 20)

Table 20

APPRENTICESHIP ENROLLMENT
HEADCOUNT AND FULL-TIME EQUIVALENT
FISCAL YEARS 1985, 1986, AND 1987

College	1985		1986		1987	
	Headcount	FTE	Headcount	FTE	Headcount	FTE
Allegany	84	32	86	35	109	47
Anne Arundel	353	145	453	145	447	144
Baltimore	215	68	296	102	334	139
Catonsville	1,046	463	947	520	1,122	540
Cecil	-	-	-	-	-	-
Charles	-	4	84	16	199	40
Chesapeake	40	8	31	11	33	13
Dundalk	66	35	212	68	120	60
Essex	337	101	369	120	634	246
Frederick	34	14	64	23	85	31
Garrett	-	-	-	-	-	-
Hagerstown	175	67	177	70	171	69
Harford	153	64	160	67	200	83
Howard	-	-	37	17	152	29
Montgomery	145	69	138	64	127	60
Prince George's	399	187	330	215	557	429
Wor-Wic Tech	133	8	109	8	259	21
Statewide	3,180	1,265	3,493	1,481	4,549	1,951

The State Board for Community Colleges collects enrollment data by college, both by headcount and by full-time equivalent student units that are used in the funding formula. The MATC also collects enrollment data by college, by trade or occupation, and by program sponsor. Individual completion of training, which usually is for a period of one to four years, has not been tracked by either State agency. Both the colleges and the Training Council estimate high completion rates due to the student selection process, which is determined by the business or sponsor, and the students' incentive for continued employment and job promotions.

Survey responses of individuals who were enrolled in apprenticeship courses (N = 231) indicate a high rate of attendance (80 percent attended all course sessions) and a high rate of completing course requirements (89 percent). Most of the apprentices reported their goal in taking the course was to update job skills or prepare for a first career. Sixty-seven percent reported the course had helped them achieve those goals.

LICENSURE/CERTIFICATION

Training for certification and licensure at community colleges can be both credit and noncredit, depending on local traditions and guidelines. A student is certified, licensed, or receives a letter of endorsement by either passing an examination or successfully completing the required coursework in an approved content area.

The career areas in licensure/certification selected for closer study are listed in Table 21. For initial certification of an individual, a test is given by the licensing agency at the conclusion of instruction or the college issues a letter of endorsement after the student successfully completes an approved set of coursework. Table 21 indicates the occupational areas requiring a certifying examination or letter of endorsement.

Table 21
INFORMATION AVAILABLE TO COLLEGES
ON EXAMINATION PASS RATES

<u>Occupation</u>	<u>Type of Certification</u>		<u>Test data available by college</u>	<u>Test results provided to college</u>
	<u>Test</u>	<u>Letter of Endorsement</u>		
Real Estate				
Realtors	x		x	*
Brokers	x		x	*
Insurance				
Property & Casualty	x			
Bail Bondsman	x			
Emergency Medicine	x		x	x
Food Sanitation	x		x	x
Water Safety	x		x	x
Pool Operation	x		x	x
CPR	x		x	x
Waste Water Management	x		x	x
Allied Health				
Geriatric Aide		x	NA	NA
Personal Aide		x	NA	NA
Medicine Aide		x	NA	NA
Child Care		x	NA	NA

* Only if college is also test site.

Certifying examinations are often administered at the colleges which then receive information available on student pass rates. In some content areas, information about pass rates is informal and depends on communication links between colleges and agencies. Table 21 also shows when data on pass rates are available for each college.

Information about pass rates is used by many colleges at the programmatic level to improve curriculum and instruction and could be incorporated at the divisional/departmental level as part of a continuing education evaluation system. Data on test results are collected by many agencies for each college and could be disseminated easily from a central source.

In the allied health area, community colleges issue letters of endorsement showing that students have completed an approved course content area. In addition to oversight of these programs by the State Department of Health and Mental Hygiene, an allied health peer review system is in place to guarantee the quality of the community college instruction. Colleges also are franchised in some content areas, such as cardiopulmonary resuscitation (CPR) and water safety, to issue (non-college) certificates to students passing the course and final examination.

Enrollments have increased the past three years in the continuing education licensure/certification area. (Table 22) This is due in part to the increased number of occupations, such as pool operation, that require certification. The colleges are an important resource for many workers who need annual instruction to maintain valid licenses in occupations such as real estate and insurance.

Survey responses of those in licensure/certification courses indicate a high rate of attendance and a high rate of completing course requirements. Most of the students in the licensure/certification courses reported their goal was to update job skills or to prepare for a different job and 77 percent reported the course had helped them to achieve their goals. Ninety percent of the survey respondents said they would recommend their licensing/certification courses to someone with the same goals and 85 percent rated the quality of instruction as very good or good.

Table 22

LICENSURE/CERTIFICATION ENROLLMENT
FISCAL YEARS 1985, 1986, AND 1987

College	1985		1986		1987	
	Headcount	FTE	Headcount	FTE	Headcount	FTE
Allegheny	180	15	322	36	359	28
Anne Arundel	445	24	926	40	1,031	54
Baltimore	139	15	290	25	200	25
Catonsville	553	55	1,427	86	687	89
Cecil	22	1	23	1	44	2
Charles	50	4	505	19	280	12
Chesapeake	220	35	502	36	160	8
Dundalk	50	30	169	51	78	21
Essex	515	53	1,081	58	1,293	82
Frederick	216	28	588	49	452	55
Garrett	NA	6	249	6	741	42
Hagerstown	150	11	208	11	280	18
Harford	180	8	463	16	361	13
Howard	191	25	266	30	719	122
Montgomery	1,221	127	1,786	138	1,827	136
Prince George's	1,004	112	1,837	138	2,287	224
Wor-Wic Tech	925	150	1,173	148	1,031	142
Statewide	6,061	699	11,815	888	11,830	1,073

BUSINESS AND INDUSTRY

Community colleges are one of Maryland's best economic development tools. Each year, through both credit and noncredit courses, colleges provide training to workers preparing for new jobs or updating skills. Continuing education courses are offered to interested adults through open enrollment or on a contract basis with a business or industry.

In fiscal year 1987, the colleges estimated that the number of registrations in contract and open enrollment courses totalled 21,368, serving 1,210 private businesses. (Table 23) Another 15,999 registrations were estimated for the public sector, representing 464 public employers. The data concerning open enrollment courses were estimated because most colleges do not collect information about employer sponsorship in open enrollment courses. The number of businesses, especially small businesses who often will send one or two employees to enroll in an open enrollment course rather than contract for a course specifically designed for their employees, is therefore probably underestimated by these data.

Because it has been difficult to identify students taking training sponsored by his/her employer, collecting data on student outcomes has been equally difficult. Further efforts on identification of employees taking courses sponsored by or contracted for their employer will be necessary. In addition, business and public sector employers can provide the best information about the success and usefulness of community college training.

Better information about the kinds of businesses already enrolling employees in open enrollment noncredit continuing education courses could increase a college's ability to design and offer new courses. More information would benefit the decision-making process about course offerings and marketing efforts.

Table 23
ESTIMATED ENROLLMENT AND NUMBER OF EMPLOYERS SERVED

<u>College</u>	<u>Private Employers</u>			
	<u>Contract Courses</u>		<u>Open Enrollment</u>	
	<u>Businesses</u>	<u>Registrants</u>	<u>Businesses</u>	<u>Registrants</u>
Allegany	8	300	15	350
Anne Arundel	22	723	NA	NA
Baltimore	17	1,625	5	10
Catonsville	80	3,367	35	951
Cecil	1	28	37	69
Charles	21	392	23	92
Chesapeake	5	95	1	120
Dundalk	32	1,787	45	80
Essex	42	1,557	NA	NA
Frederick	16	640	125	2,566
Garrett	8	999	10	50
Hagerstown	25	800	250	1,250
Harford	3	74	20	80
Howard	13	200	60	60
Montgomery	7	347	10	23
Prince George's	17	1,799	26	30
Wor-Wic Tech	14	250	218	749
Statewide	331	15,008	879	6,360
<u>College</u>	<u>Public Employers</u>			
	<u>Contract Courses</u>		<u>Open Enrollment</u>	
	<u>Agencies</u>	<u>Registrants</u>	<u>Agencies</u>	<u>Registrants</u>
Allegany	11	400	18	400
Anne Arundel	17	4,357	NA	NA
Baltimore	27	2,505	6	15
Catonsville	20	1,030	10	317
Cecil	3	46	15	41
Charles	11	500	8	39
Chesapeake	4	60	30	NA
Dundalk	10	385		
Essex	9	1,896	NA	NA
Frederick	6	80	20	600
Garrett	5	261	10	45
Hagerstown	10	200	25	125
Harford	2	397	10	50
Howard	13	200	75	75
Montgomery	6	145	8	114
Prince George's	12	1,027	25	32
Wor-Wic Tech	4	64	64	581
Statewide	170	13,565	294	2,434

CONCLUSIONS

An examination of continuing education at Maryland community colleges clearly demonstrates that noncredit instruction plays an important role in the comprehensive education of Maryland's citizens and makes a significant contribution to the State's social and economic well-being.

Information reflected in the report supports the following conclusions based on a careful assessment of the four perspectives studied.

STUDENTS

Continuing education courses reflect a broad range of subject matter, and adults enrolled in those courses represent all facets of the community. Meeting the needs of such a diverse group of people is a challenging task.

Student responses collected as a part of the outcomes project clearly indicate that the colleges have met the challenge by offering quality instruction and administration of their courses. More than nine out of ten students enrolled in continuing education courses that had requirements were able to complete the requirements. Nearly three-fourths of the continuing education students achieved their career and enrichment goals. The instructional quality and goal achievement data collected by the survey lend themselves well as outcome measures for continuing education.

The study indicates that several colleges appear inclined to focus on serving special populations, such as senior citizens. A college's capacity to serve a special population is frequently dependent on its ability to dedicate its human and fiscal resources in support of such programs and, at the same time, is subject to the control of local funding agencies and the board of trustees.

The colleges are encouraged to take advantage of every opportunity to provide all noncredit students, regardless of their reason for attending, with information about the wide range of educational opportunities available. This is especially true, for example, of students with less than a high school education who very likely would benefit from courses which offer developmental or remedial instruction and which support literacy and job readiness initiatives.

While all of the community colleges have evaluation systems in place, future studies would benefit from more systematic, ongoing data

collection and evaluation methods. This was apparent in the areas of licensure/certification and apprenticeship-related instruction. The ability to collect and analyze information more systematically would enable colleges to continue providing the oversight function in assuring the quality of courses and instructors.

The analysis of the student survey information also pointed out the need of knowing more about why students were taking a particular course. Although the reasons for offering the courses identified by the college (course intent) and the reasons identified by the students (student intent) were often related, occasionally these variables were unrelated.

APPRENTICESHIP TRAINING

The instruction community colleges provide for apprenticeship training plays an important part in Maryland's economic growth and development. The flexibility of community colleges is an asset for providing related instruction in apprenticeship training. Almost all of the State-funded related instruction in apprenticeship training is provided by community colleges.

The involvement of community colleges in apprenticeship training is likely to continue to increase over the next few years. Because the colleges have an important stake in the State-funded apprenticeship programs, the colleges and the State Board for Community Colleges should continue to work with the Maryland Department of Economic and Employment Development in making funding and data collection decisions.

Even though apprenticeship training can last from one to four years, the completion rate is high. Currently, data on completion rates of apprentices are not systematically collected and reported. The number of apprentices who complete the training is another quantifiable outcome measure for continuing education.

Community colleges serve an important function in providing quality assurance in the selection of instructional content and instructors for apprenticeship related courses. Colleges provide this oversight even when the course content is developed by a national trade or occupation affiliate and instructors are recommended by the apprenticing business or sponsor.

A notable strength of continuing education in apprenticeship training is the diversity of the instructors. Teachers combine "hands-on" knowledge with the curriculum to make classes practical, informative, and interesting. In apprenticeship training, experienced instructors are especially important. Staff development in teaching methods would help insure that the experienced practitioner is better able to communicate subject matter effectively.

LICENSURE/CERTIFICATION

The area of licensure/certification continues to grow. A number of students commented in the survey about the important role that community colleges had in helping them keep their licenses current. The colleges are

continually updating and changing continuing education curricula to meet the needs of these students, their employers, and the agencies and boards requiring such certification.

The colleges also serve an important function in training students for first-time qualifying examinations. Data about the success of students taking these exams are available and useful in formal evaluation systems. Pass rates of students seeking initial certification in a major occupational area could be an outcome measure for continuing education. Colleges also could use the information as part of ongoing processes that assure quality in the selection of content and instructors for continuing education.

BUSINESS AND INDUSTRY

One critically important factor in a healthy economic environment is the availability of a skilled workforce. The number of workers and employers taking advantage of the community college business and industry noncredit courses is indicative of the quality of these offerings and the role they play as an important source of training. Every college has made an effort to respond to the economic needs of its community by offering a wide range of courses in the business and industry area; this training contributes in a substantial way to the dynamism which is evident in Maryland's economic marketplace.

Information about the number and types of businesses that enroll employees in courses on a contract basis is available at the colleges and is helpful in the design and marketing of new offerings. However, information about employees, especially those from smaller businesses who are enrolled in the open enrollment courses, is difficult to obtain. Information about students sponsored by employers would be useful in more accurately describing the college activities in economic development.

RECOMMENDATIONS

The recommendations listed below are based on the results of this report. Some colleges and the SBCC have begun implementing the recommended changes. However, implementation of all the recommendations will result in a stronger system of continuing education in Maryland's community colleges.

1. The State Board for Community Colleges, in conjunction with the community colleges, should use survey and other data to construct a reliable and useful performance profile for continuing education. The following five outcome measures should be adopted as the bases for gathering data for the development of the performance profile:
 - o Student pass rates on selected certification examinations
 - o Employer satisfaction with business and industry training courses
 - o Completion rates of students enrolled in courses with completion requirements
 - o Student rating of the quality of instruction
 - o Student indication of goal achievement

As experience with data for these measures is developed, further refinements of data gathering mechanisms and consideration of additional measures may be required. The State Board and the community colleges should assess the issues that emerged in the development of outcome measures to determine appropriate future action where warranted.

2. Data collection at the State and college levels should be reviewed and improved to assist the evaluation, planning, and marketing processes of the colleges.
 - o The State Board for Community Colleges should work with licensure/certification agencies in obtaining data about student pass rates by college and should forward such data to appropriate deans and directors to be used in college course evaluations.

- o Colleges should collect additional data about the reasons the students attend.
 - o Colleges should collect data about the number of students who begin and complete apprenticeship training.
 - o Colleges should acquire information about employer-sponsored students in open enrollment courses.
 - o Colleges should publicize information about their activities that support economic development activities. This information should be used at local and State budgetary hearings.
3. The State Board for Community Colleges and the community colleges should work closely with the Maryland Apprenticeship and Training Council to develop guidelines for future apprenticeship training, funding, and data collection.

OVERVIEW OF CONTINUING EDUCATION

The mission of Maryland community colleges has always included comprehensive continuing education for the citizens of Maryland. It is one of the three major functions of the Maryland community college system, along with career and transfer programs which comprise courses offered for credit towards an associate degree. Since the establishment of the first Maryland community college in 1946, a variety of continuing education courses has been initiated and refined to satisfy the vocational, academic, and self-enrichment needs of adults.

The term "continuing education" can be broadly or narrowly defined. In a broad context, continuing education is any educational activity for adults beyond high school. Within the Maryland community college system, the term continuing education has different connotations among the colleges. Several colleges refer to their evening divisions of credit courses as continuing education. Others use the term only in reference to noncredit offerings.

For funding purposes, the State Board for Community Colleges (SBCC) defines continuing education as regularly scheduled community college courses offered not for academic credit but designed to meet the needs of part-time and returning students. When a continuing education course is referred to as noncredit, it means that course completion does not count toward a formal degree. The fact that no credit is offered does not reflect on the quality or content of these courses. Frequently these courses fulfill requirements for professional certification and licensure. All courses have requirements for clear learning objectives and for maintaining the quality necessary to help students achieve their educational goals.

Some continuing education courses are self-supporting and some are State-assisted. State-assisted continuing education courses include only those noncredit courses that have been evaluated and approved by the SBCC and that are offered to satisfy the vocational development, professional development, or self-development needs of part-time and returning adult students. State-assisted continuing education courses must be in a course format.

Community service is defined by the SBCC as activities, other than the formal courses, that are developed for the growth, education, development, or enrichment of Maryland citizens and groups. The State does not participate in the funding of such community service activities; these activities

are self-supporting or are funded by the political subdivisions or outside sources.

These legal and functional definitions do not begin to describe the depth and breadth of continuing education at Maryland community colleges. Continuing education draws thousands of Marylanders to community college campuses and their off-campus sites each year. In fiscal year 1987, the total number of individuals enrolled in noncredit continuing education courses assisted by State aid exceeded 140,000. These students represented over 300,000 course registrations in more than 6,900 approved courses.

Noncredit courses are offered at hundreds of locations throughout the State. Students can take courses at the college campuses and extension centers, county vocational-technical and community centers, and local businesses. Noncredit courses are developed to teach specific skills and knowledge, and are offered for one session or several sessions over a period of time. Courses are not restricted to semesters or quarters and are adjusted to meet the needs of students and employers. The instructional staff includes mostly part-time college instructors who are experts, consultants, and practitioners in the field in which they teach.

Continuing education, because it can respond quickly to provide new quality courses at the places and times required by the community, allows the community college system to remain responsive to new community and State needs. Business and occupational groups work with the colleges in designing specific training for employees. Local Private Industry Councils consult the community colleges for assistance in job training for the unemployed. Students seeking certification or licensure in specific fields, such as gerontology, real estate, food handling, among others, come to the colleges to complete approved coursework and prepare for qualifying examinations. Continuing education, in addition to having the resources and flexibility to provide job specific training, has joined the State in fighting illiteracy by offering an increased number of new courses in adult basic and remedial education.

Noncredit courses designed for personal growth and enrichment are an important resource for adults who want to expand their horizons. The following table gives some examples of courses in the ten noncredit course intent categories used by Maryland community colleges.

COURSE INTENT AREAS
AND
SAMPLE COURSE TITLES

<u>Course Intent Area</u>	<u>Course Title</u>
Vocational/Technical	Word Processing Mobile Crane Operator Safety Training First-Line Management
Remedial	Basic Reading Skills GED Preparation Practical Writing for College-Bound Students
Community Development	Preparation for U. S. Citizenship Volunteer Training Leadership Training for Community Service Agencies
Consumer	Small Claims Court Wills and Estate Planning Techniques Introduction to Financial Planning
Health Care/Science	Cardiopulmonary Resuscitation Diabetic Education Care of the Terminally Ill
General Interest	History of Baltimore Basic Principles of Art Psychology of Stress
Licensure/Certification	Real Estate Sales Property and Casualty Insurance Medical Emergency Management
Family Life	Communication In A Crisis Responsive Parenting Understanding Family Development
Apprenticeship-Related Training	Plumbing Installation Practices Operating Engineer Electrician Training
Business/Industrial Training	Basic Computer Understanding for Business Entrepreneurship and Excellence How to Run A Business in Your Home

APPENDIX B

QUESTIONNAIRE

SURVEY OF CONTINUING EDUCATION STUDENTS

MARYLAND COMMUNITY COLLEGES

Maryland's community colleges would like your assistance in assessing and improving their continuing education courses. Please complete this questionnaire by circling your response for each question and then returning it in the prepaid envelope provided. This form should take less than 10 minutes to complete. All answers will be strictly confidential. Thank you for your help.

0

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(Please make corrections if necessary)

Name _____

Address _____

0

0

A. Community college records show that you enrolled in the course identified on the above mailing label. Which statement best describes your attendance in this course?

1. I did not attend any sessions of this course. (GO to question H.)
2. I attended just one session. (If course had only one session, circle response 4 below.)
3. I attended more than one session but not all sessions.
4. I attended all sessions of this course.

B. What was your primary goal in enrolling in this course? (Circle one)

1. Prepare for entry into first career
2. Prepare for entry into different career
3. Update skills for current job
4. Self-enrichment
5. Other (specify) _____

C. To what extent did this course meet your goal? (Circle one)

1. Completely 2. Mostly 3. Fairly well 4. A little 5. Not at all

D. Would you recommend this course to others with the same goal? (Circle one)

1. Yes
2. No
3. Not sure

E. Was this course taken to fulfill licensure or certification requirements?
(Circle one)

1. Yes
2. No

(over)

F. Did you satisfactorily complete all the course requirements for this course?
(Circle one)

1. Yes
2. No
3. Not applicable/course had no specific requirements

G. Did you earn continuing education units (CEUs) for completing this course?
(Circle one)

1. Yes
2. No
3. Not applicable/no CEU associated with course

H. How would you rate the quality of instruction in this course? (Circle one)

1. Very good
2. Good
3. Fair
4. Poor
5. Very poor

I. How would you rate the registration/payment procedures of enrolling in this course?
(Circle one)

1. Very good
2. Good
3. Fair
4. Poor
5. Very poor

J. What was your employment status at the time you took this course?
(Circle all that apply)

1. Employed full-time (35 or more hours per week)
2. Employed part-time
3. Unemployed and seeking a job
4. Unemployed and not seeking a job
5. Employed and seeking a different job
6. Retired
7. Other (specify) _____

K. What was the highest level of education you had achieved at the time you took this course? (Circle one)

1. Less than high school diploma or GED
2. High school diploma or GED
3. Some college credits/less than a degree or certificate
4. Community college certificate or degree
5. Bachelor's degree
6. Master's or first professional degree
7. Doctorate

L. How could the college improve its continuing education courses to better meet your needs?

THANK YOU for completing the survey! Please return in enclosed envelope.

CONTINUING EDUCATION

STUDENT FOLLOW-UP REPORT

Maryland State Board for Community Colleges
914 Bay Ridge Road o Annapolis, MD 21403
(301) 974-2881
September 1988

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Ms. Nola Arnold
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PREFACE

The State Board for Community Colleges routinely conducts follow-up studies of credit students to provide information to Maryland community colleges for self-improvement. However, the last statewide survey of continuing education was conducted in 1982. This report describes the results of the follow-up survey of fiscal year 1987 continuing education students and is the companion document to the *Continuing Education Outcomes* report.

Also included in this student follow-up report is a profile of continuing education students reflecting the characteristics of those who were enrolled in noncredit course offerings. The student profile includes data about students who responded to the survey and descriptive data about all fiscal year 1987 continuing education students. This report also documents the quality of noncredit instruction and administration that is prevalent in Maryland community colleges.

ACKNOWLEDGEMENTS

The advice and invaluable assistance of the Continuing Education Outcomes Committee during the two years of work that culminated in the preparation of this report is very much appreciated. The Committee was comprised of representatives of the Deans and Directors of Continuing Education and Directors of Institutional Research of the Maryland community colleges.

Committee members were:

Charlotte Bartels	Patricia Haeuser
Michael Chase	David Hemenway
Craig Claggett	Veronica Norwood
Nancy Colmer	Carolyn Smith

Also, Dorothy Linthicum, consultant, organized the information collected, analyzed student survey data, and compiled the final report. Additionally, Maxine J. Pope of the State Board staff edited and prepared the manuscript. Special thanks are in order to Hercules Pinkney and Daniel McConochie of the State Board staff for providing the overall guidance and coordination of this statewide endeavor. Also, thanks to Maureen Jackson, State Board programmer/analyst, for her training of personnel and supervising the data entry associated with this effort.

The State Board for Community Colleges also is grateful to the Division of Vocational-Technical Education of the Maryland State Department of Education for grant funding support of the final phase of the Outcomes Project.

James D. Tschechtelin
Executive Director

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INTRODUCTION

In 1987, the State Board for Community Colleges (SBCC) assigned staff and appointed an advisory group of continuing education deans and institutional research directors from the Maryland community colleges to an outcomes committee to develop a set of summary data measures for continuing education. The committee agreed that an important part of outcomes was student opinion. A questionnaire was developed to provide student input in four major areas. (Appendix A)

This report is a summary of the data collected from that questionnaire. Actual data on student demographics from fiscal year 1987 were included to make comparisons and to show possible respondent bias. Percentages have been rounded and may not total 100 percent.

Research questions were identified for the four major areas of study:

1. Do students complete courses they begin?
2. Do students achieve their primary goals for the courses they take?
3. How do students rate the quality of instruction?
4. How effective are administrative procedures for students?

STUDENT PROFILE

The Student Profile includes data about students who responded to the survey and descriptive data about all continuing education students enrolled in fiscal 1987. Data concerning the total population come from the SBCC Continuing Education Course Inventory and the End-of-Year Student File.

In fiscal 1987, there were 144,081 students who took an average of 2.1 courses in continuing education (305,362 course registrations divided by 144,081 individual students). The mean age of these students was 46 years old. Dundalk and Baltimore had the highest mean age (56 and 53 respectively) and Frederick (34 years old) was serving the youngest group of students. Sixty percent of the community college students were female compared with 63 percent of the students enrolled in community college credit programs. Twenty-two percent of the continuing education students were from minority groups. (Table 1)

The average continuing education student responding to the survey was a 50-year-old white female. The demographic variables of the respondents were similar to those of the total population of students. More older students responded to the survey.

Tables 2, 3, and 4 compare the sex, mean age, and race of subgroups of survey respondents with the total continuing education student population for fiscal 1987. The colleges that emphasized work-related courses tended to have fewer women and younger students. Colleges serving large numbers of seniors tended to have more women in continuing education courses and tend to have a higher median age. Minorities tended to have a lower response rate which should be considered in comparing colleges on the responses to other questions.

Almost half of the sample was employed full- or part-time; a third was retired. Eighty-two percent of the students taking work-related courses were employed. Adults under 60 years of age taking general courses also were likely to be employed. (Table 5) Employment data by college varied widely: employed full-time ranged from 15 to 68 percent; retired status went from 3 to 57 percent. (Table 6)

Most (88 percent) continuing education students reported they had earned at least a high school diploma. (Table 7) Over a fourth of the students held bachelor, master's or doctorate degrees. Work-related students were more likely to have completed high school. Table 8 shows wide variance in education levels which is primarily a reflection of a jurisdiction's demographics and, to a lesser extent, course offerings.

Table 1

DEMOGRAPHIC CHARACTERISTICS OF ALL STUDENTS AND RESPONDENTS

College	Total Number		Percent Female		Percent Minority		Mean Age	
	Students	Respondents	Students	Respondents	Students	Respondents	Students	Respondents
Allegany	4,773	242	61%	50%	1%	1%	43	47
Anne Arundel	17,737	1,575	60	63	13	8	42	45
Baltimore	13,072	480	66	77	54	43	53	68
Catonsville	19,343	1,299	58	62	25	18	51	61
Cecil	2,273	159	65	77	12	4	37	43
Charles	4,086	366	61	64	17	7	37	39
Chesapeake	3,289	284	69	65	18	9	51	48
Dundalk	8,791	640	51	59	22	9	56	68
Essex	15,859	1,136	69	66	12	8	48	49
Frederick	2,886	202	59	58	8	9	34	36
Garrett	2,281	200	50	54	2	-	40	36
Hagerstown	4,029	384	45	59	10	7	41	46
Harford	7,882	607	47	64	18	9	38	44
Howard	8,047	745	61	63	18	14	38	43
Montgomery	9,725	664	66	67	NA	NA	48	57
Prince George's	17,139	1,470	61	65	47	30	46	61
Wor-Wic Tech	2,869	230	52	54	17	12	37	39
Statewide	144,081	10,683	60%	64%	22	15	46	50

Table 2
PERCENT FEMALE
RESPONDENTS AND TOTAL POPULATION

<u>College</u>	<u>Respondents in</u>			<u>Total Population</u>
	<u>Work-Related and General Courses</u>	<u>Senior Courses</u>	<u>Total</u>	
Allegany	54%	40%	50%	61%
Anne Arundel	57	75	63	60
Baltimore	64	81	77	66
Catonsville	51	73	62	58
Cecil	74	85	77	65
Charles	62	74	64	61
Chesapeake	65	66	65	69
Dundalk	30	71	59	51
Essex	62	73	66	69
Frederick	58	67	58	59
Garrett	53	63	54	50
Hagerstown	43	87	59	45
Harford	60	70	64	47
Howard	62	68	63	61
Montgomery	66	68	67	66
Prince George's	61	68	65	61
Wor-Wic Tech	54	58	54	52
Statewide	58%	72%	64%	60%

Table 3
MEAN AGE
RESPONDENTS AND TOTAL POPULAATION

<u>College</u>	<u>Respondents in</u>			<u>Total Population</u>
	<u>Work-Related and General Courses</u>	<u>Senior Courses</u>	<u>Total</u>	
Allegany	39	66	47	43
Anne Arundel	36	68	45	42
Baltimore	36	73	68	53
Catonsville	38	72	61	51
Cecil	34	67	43	37
Charles	35	64	39	37
Chesapeake	35	69	48	51
Dundalk	40	73	68	56
Essex	36	71	49	48
Frederick	35	61	36	34
Garrett	34	64	36	40
Hagerstown	35	68	46	41
Harford	35	69	44	38
Howard	37	67	43	38
Montgomery	38	69	57	48
Prince George's	34	68	61	46
Wor-Wic Tech	36	65	39	37
Statewide	36	71	50	46

Table 4
RACE
PERCENT OF RESPONDENTS AND TOTAL POPULATION

<u>College</u>	<u>Respondents</u>		<u>Total</u>
	<u>Black</u>	<u>All Minorities</u>	<u>Population</u> <u>All Minorities</u>
Allegany	1%	1%	1%
Anne Arundel	8	8	13
Baltimore	41	43	54
Catonsville	9	18	25
Cecil	3	4	12
Charles	6	7	17
Chesapeake	8	9	18
Dundalk	6	9	22
Essex	7	8	12
Frederick	2	9	8
Garrett	-	-	2
Hagerstown	7	7	10
Harford	7	9	18
Howard	10	14	18
Montgomery	NA	NA	NA
Prince George's	15	30	47
Wor-Wic Tech	10	12	17
Statewide	10%	15%	22%

Table 5
WORK STATUS OF RESPONDENTS
BY GROUP

Group	Employed Full-time	Employed Part-time	Unem- ployed	Unemployed/ Not Seeking Work	Employed Seeking Different Job	Retired	Other
Work-related (under 60)	73%	10%	5%	4%	4%	1%	5%
General (under 60)	48	11	13	10	3	3	12
Seniors (over 60)	6	4	1	3	-	79	8
All Students	41%	8%	5%	4%	2%	33%	7%

Table 6
WORK STATUS OF RESPONDENTS
ALL STUDENTS BY COLLEGE

College	Employed Full-time	Employed Part-time	Unem- ployed	Unemployed/ Not Seeking Work	Employed Seeking Different Job	Retired	Other
Allegany	48%	12%	5%	3%	2%	23%	7%
Anne Arundel	51	8	1	4	2	28	7
Baltimore	15	3	3	5	3	49	23
Catonsville	35	6	4	3	2	42	8
Cecil	38	12	6	7	4	23	10
Charles	54	14	3	6	2	15	6
Chesapeake	43	10	4	8	2	27	7
Dundalk	19	3	9	4	1	57	8
Essex	47	7	6	2	1	33	4
Frederick	68	10	7	4	2	3	7
Garrett	56	8	8	6	4	6	13
Hagerstown	37	5	6	6	2	37	7
Harford	36	11	11	7	3	26	6
Howard	50	11	4	5	3	20	7
Montgomery	37	10	3	6	1	36	6
Prince George's	36	6	4	3	2	45	5
Wor-Wic Tech	61	12	3	4	5	9	6
Statewide	41%	8%	5%	4%	2%	33%	7%

Table 7
EDUCATION STATUS OF RESPONDENTS
BY GROUP

Group	Less Than High School	High School	Some College	Associate Degree	Bachelor Degree	Master's Degree	Doctorate
Work-related (under 60)	4%	26%	30%	10%	20%	10%	2%
General (under 60)	19	22	25	7	15	10	1
Seniors (over 60)	18	33	23	3	13	9	1
All Students	12%	28%	26%	7%	16%	10%	1%

Table 8
EDUCATION STATUS OF RESPONDENTS
ALL STUDENTS BY COLLEGE

College	Less Than High School	High School	Some College	Associate Degree	Bachelor Degree	Master's Degree	Doctorate
Allegany	6%	35%	24%	11%	12%	10%	3%
Anne Arundel	12	25	26	8	18	12	1
Baltimore	46	33	12	2	3	4	-
Catonsville	12	33	26	5	14	8	1
Cecil	12	38	22	6	18	4	1
Charles	9	28	38	8	11	6	-
Chesapeake	16	23	26	7	18	8	2
Dundalk	26	36	20	5	8	4	-
Essex	8	25	27	9	19	9	3
Frederick	8	25	35	7	13	11	2
Garrett	18	35	22	10	5	8	1
Hagerstown	8	44	22	5	14	7	1
Harford	20	35	23	6	8	7	1
Howard	8	16	23	8	26	17	3
Montgomery	7	15	24	6	28	17	3
Prince George's	5	26	34	6	18	10	1
Wor-Wic Tech	5	32	32	9	17	5	1
Statewide	12%	28%	26%	7%	16%	10%	1%

COURSE COMPLETION

Course completion was measured by two variables on the continuing education student survey: self-reported attendance and completion of course requirements. Since the sample included only students eligible for State funding, each respondent would have attended some portion of the course. About a third of the total sample and 82 percent of the work-related sample attended all sessions of the continuing education course. (Table 9)

Table 10 shows attendance rates by college for students under 60 years of age. Senior data were deleted since course content and other factors, such as health, affect course attendance. By college, attendance at all sessions ranged from 68 percent to 88 percent. The statewide average for attendance at all sessions was 78 percent.

Table 11 shows the influence of adding senior data to this variable. Attendance at all sessions fell 22 points at one college when senior data were included.

More than 90 percent of the students taking courses with requirements reported they had completed the requirements. Work-related students were more likely to complete course requirements than other students. (Table 12) Almost 40 percent of the respondents indicated that course requirements were not applicable for the continuing education course they took.

Table 13 shows the completion of course requirements by college. Very little variance was found between students under age 60 and all students. The low completion rates at some colleges could be explained by the education status of their continuing education students. Respondents with no college education were less likely to complete requirements than students with some higher education. (Table 14)

Students also were asked if they earned continuing education units (CEUs) for completing the course. Twenty-one percent of the total respondents indicated they had earned CEUs for the course. (Table 15). About 23 percent of the respondents indicated the noncredit course they took was to meet licensure requirements. Among colleges, the percentage of such students ranged from 14 percent to 56 percent.

Table 9
ATTENDANCE
ALL STUDENTS

<u>Group</u>	<u>No Sessions</u>	<u>One Session</u>	<u>Some Sessions</u>	<u>All Sessions</u>
Work-related (under 60)	2%	3%	14%	82%
General (under 60)	3	2	26	69
Seniors (over 60)	4	2	43	50
All Students	3%	2%	28%	67%

Table 10
ATTENDANCE
STUDENTS UNDER AGE 60

<u>College</u>	<u>No Sessions</u>	<u>One Session</u>	<u>Some Sessions</u>	<u>All Sessions</u>
Allegany	4%	7%	13%	76%
Anne Arundel	3	2	14	81
Baltimore	-	3	24	74
Catonsville	2	2	17	80
Cecil	3	3	18	77
Charles	4	2	23	71
Chesapeake	4	5	23	69
Dundalk	4	3	14	79
Essex	-	2	11	88
Frederick	2	2	17	79
Garrett	1	3	17	80
Hagerstown	1	-	18	81
Harford	1	3	28	68
Howard	2	2	27	68
Montgomery	3	3	17	77
Prince George's	3	3	13	81
Wor-Wic Tech	3	2	18	78
Statewide	2%	3%	17%	78%

Table 11
ATTENDANCE
ALL STUDENTS

<u>College</u>	<u>No Sessions</u>	<u>One Session</u>	<u>Some Sessions</u>	<u>All Sessions</u>
Allegany	5%	6%	17%	72%
Anne Arundel	4	2	24	71
Baltimore	2	2	38	58
Catonsville	3	2	31	64
Cecil	2	5	30	63
Charles	4	3	26	67
Chesapeake	9	4	30	58
Dundalk	4	3	36	57
Essex	1	2	23	74
Frederick	2	2	16	80
Garrett	1	4	19	77
Hagerstown	1	1	29	69
Harford	3	3	31	63
Howard	3	2	30	65
Montgomery	2	2	26	69
Prince George's	5	2	31	62
Wor-Wic Tech	2	3	18	77
Statewide	3%	2%	28%	67%

Table 12
COMPLETION OF COURSE REQUIREMENTS

<u>Group</u>	<u>Yes</u>	<u>No</u>
Work-related (under 60)	95%	6%
General (under 60)	86	14
Seniors (over 60)	88	12
All Students	91%	9%

Table 13
COMPLETION OF COURSE REQUIREMENTS

<u>College</u>	<u>Students Under Age 60</u>	<u>All Students</u>
Allegany	96%	94%
Anne Arundel	95	93
Baltimore	76	82
Catonsville	93	93
Cecil	88	90
Charles	92	91
Chesapeake	92	89
Dundalk	90	88
Essex	95	95
Frederick	94	94
Garrett	95	95
Hagerstown	96	96
Harford	79	81
Howard	89	89
Montgomery	96	92
Prince George's	94	91
Wor-Wic Tech	94	92
Statewide	92%	91%

Table 14

COMPLETION OF COURSE REQUIREMENTS
BY EDUCATION STATUS
ALL STUDENTS

<u>Education Status</u>	<u>Yes</u>	<u>No</u>
Less than high school	9%	23%
High school	28	27
Some college	28	24
Associate degree	8	6
Bachelor's degree	16	14
Master's/Doctorate	11	6

Table 15

PERCENT TAKING COURSES FOR
LICENSURE OR CONTINUING EDUCATION UNITS
ALL STUDENTS

<u>College</u>	<u>Licensure</u>	<u>Continuing Education Units</u>
Allegany	27%	26%
Anne Arundel	21	37
Baltimore	15	11
Catonsville	20	13
Cecil	18	5
Charles	41	38
Chesapeake	24	25
Dundalk	14	8
Essex	30	30
Frederick	40	32
Garrett	56	25
Hagerstown	18	16
Harford	26	15
Howard	17	13
Montgomery	23	13
Prince George's	18	17
Wor-Wic Tech	37	17
Statewide	23%	21%

GOAL ACHIEVEMENT

Continuing education students were asked their primary goal in enrolling in the course and to what extent the course met their goals. Senior students tended to have self-enrichment as a goal, while work-related students were more likely to take the course to update skills. (Table 16) Very few students took the course to prepare for entry into a first career, while about 8 percent had a goal of preparing for entry into a different career.

Data are shown for students under 60 since such a large proportion of seniors had goals of self-enrichment or other. (Table 17) Variances in the data for colleges that had a large number of seniors responding to the survey were difficult to detect when all students were considered.

Table 18 shows the proportion of students who achieved or mostly achieved their goals, those who did fairly well, those who accomplished a small portion of their goal, and those who achieved none of their goals. Overall, 73 percent achieved or mostly achieved their goal for the course. Only 2 percent achieved none of their goals. A greater proportion of senior students said they achieved their goals. College goal achievement data for each college for students under 60 and for all students are shown in Table 19. Education level did not play a significant role in personal goal achievement. (Table 20)

Table 21 shows goal achievement of students by type of goal. Students with goals of preparing for different careers were less likely to achieve or mostly achieve goals than other students. Table 22 shows students by group who said they achieved or mostly achieved goals by the type of goal. Students with goals of preparing for a different career were less likely to achieve or mostly achieve their goals.

Table 16
STUDENT GOALS
ALL STUDENTS

<u>Group</u>	<u>Preparation for First Career</u>	<u>Preparation for Different Career</u>	<u>Update Skills</u>	<u>Self- Enrichment</u>	<u>Other</u>
Work-related (under 60)	4%	13%	51%	22%	10%
General (under 60)	8	11	17	46	18
Seniors (over 60)	-	2	4	74	20
All Students	3%	8%	26%	48%	15%

Table 17
PRIMARY GOAL
STUDENTS UNDER 60

<u>College</u>	<u>Preparation for First Career</u>	<u>Preparation for Different Career</u>	<u>Update Skills</u>	<u>Self- Enrichment</u>	<u>Other</u>
Allegany	3%	11%	50%	23%	14%
Anne Arundel	3	7	46	35	10
Baltimore	13	9	46	29	4
Catonsville	5	16	44	23	13
Cecil	7	6	36	32	18
Charles	8	11	42	26	13
Chesapeake	7	10	41	32	10
Dundalk	7	31	38	13	11
Essex	6	9	60	16	10
Frederick	3	9	42	29	18
Garrett	1	10	44	28	17
Hagerstown	11	8	36	37	8
Harford	8	14	26	34	19
Howard	2	11	30	45	13
Montgomery	3	20	36	24	17
Prince George's	8	18	34	30	10
Wor-Wic Tech	4	11	46	33	6
Statewide	5%	12%	41%	29%	12%

Table 18
ACHIEVEMENT OF GOALS
ALL STUDENTS

<u>Group</u>	<u>Achieve</u>	<u>Mostly Achieve</u>	<u>Fair</u>	<u>Little</u>	<u>None</u>
Work-related (under 60)	35%	32%	22%	9%	3%
General (under 60)	37	29	20	10	4
Seniors (over 60)	53	28	14	4	13
All Students	43%	30%	18%	7%	2%

Table 19
GOAL ACHIEVEMENT
STUDENTS UNDER AGE 60 AND ALL STUDENTS
ACHIEVED OR MOSTLY ACHIEVED

<u>College</u>	<u>Students Under Age 60</u>	<u>All Students</u>
Allegany	70%	74%
Anne Arundel	66	72
Baltimore	62	80
Catonsville	67	72
Cecil	79	80
Charles	70	71
Chesapeake	63	64
Dundalk	61	78
Essex	71	77
Frederick	76	75
Garrett	78	78
Hagerstown	72	77
Harford	61	68
Howard	61	65
Montgomery	57	65
Prince George's	66	74
Wor-Wic Tech	62	61
Statewide	66%	72%

Table 20

**GOAL ACHIEVEMENT BY LEVEL OF EDUCATION
ALL STUDENTS**

<u>Goal</u>	<u>Less Than High School</u>	<u>High School</u>	<u>Some Colleg</u>	<u>Associate Degree</u>	<u>Bachelor Degree</u>	<u>Master's/ Doctorate</u>
Achieve	47%	48%	44%	33%	35%	36%
Mostly achieve	26	28	30	29	32	35
Fair	19	16	18	23	21	19
Little	7	6	6	12	9	7
None	1	2	2	3	3	3

Table 21

**GOAL ACHIEVEMENT BY TYPE OF GOAL
ALL STUDENTS**

<u>Goal</u>	<u>Achieve</u>	<u>Mostly Achieve</u>	<u>Fair</u>	<u>Little</u>	<u>None</u>
First career	40%	31%	19%	7%	3%
Different career	37	25	22	11	6
Update skills	35	33	22	8	2
Self-enrichment	47	29	17	6	2
Other	44	30	17	7	2

Table 22

**GOAL ACHIEVEMENT BY TYPE OF GOAL
ALL STUDENTS**

<u>Group</u>	<u>Preparation for First Career</u>	<u>Preparation for Different Career</u>	<u>Update Skills</u>	<u>Self- Enrichment</u>	<u>Other</u>	<u>All Goals</u>
Work-related (under 60)	67%	62%	69%	62%	72%	67%
General (under 60)	78	61	68	66	64	66
Seniors (over 60)	50	65	68	83	79	81
All Students	71%	62%	69%	76%	74%	72%

QUALITY OF INSTRUCTION

Students were asked to rate the quality of instruction from very good to very poor. They also were asked whether or not they would recommend the college to others with similar goals. Both questions were viewed as a measure of the student's assessment of instructional quality.

Almost 90 percent of the sample population indicated instruction was very good or good. (Table 23) Senior students tended to be more positive than students taking work-related courses; about 70 percent of the seniors said instruction was very good. Of the work-related and general groups of students, those who completed course requirements were more likely to rate instruction very good or good. Students with higher education were more likely to find instruction fair or poor. Among colleges, students under age 60 rating instruction good or very good ranged from 78 percent to 93 percent. (Table 24) When senior responses were added to the data, there were significant differences at several colleges. (Table 25)

Eighty-nine percent of all students would recommend their course to others with the same goal. (Table 26) Older students were especially positive in their response to this question. Many respondents added comments at the end of the survey about their satisfaction with the course and instructor. Only one college deviated significantly in comparison with other colleges on this variable. For students under age 60, adding seniors to the results increased percentages at thirteen of the seventeen colleges. The statewide average for students under 60 who would recommend the course was 86 percent. (Table 27) Similar to the rating of instruction, students who attended all sessions and completed course requirements were more likely to recommend the course to others.

Table 23
STUDENT RATING OF INSTRUCTION
ALL STUDENTS

<u>Group</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Work-related (under 60)	46%	39%	11%	3%	1%
General (under 60)	55	31	10	3	1
Seniors (over 60)	71	23	5	1	-
All Students	58%	31%	8%	2%	1%

Table 24
RATING OF INSTRUCTION
STUDENTS UNDER AGE 60

<u>College</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Allegany	54%	38%	4%	3%	-
Anne Arundel	51	36	10	2	1%
Baltimore	52	33	10	5	-
Catonsville	53	34	11	2	-
Cecil	62	27	6	3	2
Charles	48	35	13	2	3
Chesapeake	46	35	15	2	3
Dundalk	46	39	11	3	-
Essex	45	44	9	2	-
Frederick	52	33	12	1	1
Garrett	55	38	6	1	-
Hagerstown	53	37	7	2	2
Harford	52	31	13	3	2
Howard	44	34	13	7	2
Montgomery	46	37	14	3	1
Prince George's	46	39	11	3	1
Wor-Wic Tech	48	40	6	3	4
Statewide	49%	36%	11%	3%	1%

Table 25

RATING OF INSTRUCTION
ALL STUDENTS

<u>College</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Allegany	56%	36%	5%	2%	1%
Anne Arundel	59	30	8	2	1
Baltimore	58	36	4	1	1
Catonsville	62	29	8	1	-
Cecil	65	27	5	2	1
Charles	53	30	13	2	2
Chesapeake	49	34	12	4	2
Dundalk	67	26	6	1	1
Essex	56	35	8	1	-
Frederick	52	33	13	1	1
Garrett	56	37	6	1	-
Hagerstown	60	31	6	2	1
Harford	61	26	11	2	1
Howard	49	32	12	6	2
Montgomery	56	31	10	3	1
Prince George's	60	30	8	1	1
Wor-Wic Tech	49	38	7	3	3
Statewide	58%	31%	8%	2%	1%

Table 26
WOULD RECOMMEND COURSE
ALL STUDENTS

<u>Group</u>	<u>Yes</u>	<u>No</u>	<u>Not Sure</u>
Work-related (under 60)	87%	6%	8%
General (under 60)	85	8	8
Seniors (over 60)	95	2	4
All Students	89%	5%	6%

Table 27
WOULD RECOMMEND COURSE
OVER AGE 60 AND ALL STUDENTS

<u>College</u>	<u>Students Under Age 60</u>	<u>All Students</u>
Allegany	90%	90%
Anne Arundel	85	89
Baltimore	89	94
Catonsville	86	90
Cecil	86	90
Charles	84	85
Chesapeake	84	83
Dundalk	83	93
Essex	91	93
Frederick	88	87
Garrett	96	96
Hagerstown	92	94
Harford	86	89
Howard	78	82
Montgomery	83	85
Prince George's	86	91
Wor-Wic Tech	85	84
Statewide	86%	89%

QUALITY OF ADMINISTRATION

Continuing education courses are offered at hundreds of locations throughout the State each year. The length of courses range from one day to several months, and course schedules do not necessarily correspond to regular semesters or quarters. Colleges register students by telephone or on-site the same day a course is scheduled to begin.

To gauge how well colleges operate under these conditions, students were asked in the survey to rate the registration/payment procedures for continuing education. Over 92 percent of the respondents said the procedures were good or very good. Only 2 percent rated procedures poor or very poor. (Table 28) Among the colleges, students rating of procedures as good or very good ranged from 84 percent to 95 percent for students under 60. (Table 29) Ratings of fair and poor ranged from 4 percent to 16 percent. Table 30 shows ratings for all students. Registration procedures for seniors vary from non-senior procedures at some colleges. Overall, satisfaction was higher for all students.

Table 28
QUALITY OF ADMINISTRATION
ALL STUDENTS

<u>Group</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Work-related (under 60)	48%	42%	8%	1%	1%
General (under 60)	49	42	7	1	1
Seniors (over 60)	67	29	4	-	-
All Students	56%	37%	6%	1%	1%

Table 29
QUALITY OF ADMINISTRATION
STUDENTS UNDER AGE 60

<u>College</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Allegany	51%	44%	5%	1%	-
Anne Arundel	53	40	5	1	1%
Baltimore	54	30	14	2	-
Catonsville	48	39	10	2	1
Cecil	56	38	5	2	-
Charles	47	44	7	1	2
Chesapeake	47	47	5	-	2
Dundalk	54	35	11	-	-
Essex	47	45	8	1	-
Frederick	48	41	9	2	-
Garrett	59	34	7	-	-
Hagerstown	46	47	6	1	1
Harford	53	38	7	2	-
Howard	43	46	9	2	-
Montgomery	43	46	9	1	1
Prince George's	45	44	9	1	1
Wor-Wic Tech	46	48	4	-	2
Statewide	49%	42%	8%	1%	1%

Table 30
QUALITY OF ADMINISTRATION
ALL STUDENTS

<u>College</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Very Poor</u>
Allegany	54%	40%	6%	1%	-%
Anne Arundel	60	34	5	1	-
Baltimore	47	44	8	2	-
Catonsville	58	32	8	1	1
Cecil	58	36	4	1	-
Charles	54	38	6	1	1
Chesapeake	52	43	4	-	2
Dundalk	59	33	7	-	1
Essex	53	39	7	1	-
Frederick	49	40	9	2	-
Garrett	60	33	7	-	-
Hagerstown	58	38	4	-	-
Harford	58	35	5	1	-
Howard	47	44	8	1	-
Montgomery	53	38	7	1	-
Prince George's	58	35	6	1	-
Wor-Wic Tech	50	45	4	-	1
Statewide	56%	37%	6%	1%	1%

APPENDIX A

QUESTIONNAIRE

SURVEY OF CONTINUING EDUCATION STUDENTS MARYLAND COMMUNITY COLLEGES

Maryland's community colleges would like your assistance in assessing and improving their continuing education courses. Please complete this questionnaire by circling your response for each question and then returning it in the prepaid envelope provided. This form should take less than 10 minutes to complete. All answers will be strictly confidential. Thank you for your help.

0

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(Please make corrections if necessary)

Name _____

Address _____

0

0

A. Community college records show that you enrolled in the course identified on the above mailing label. Which statement best describes your attendance in this course?

1. I did not attend any sessions of this course. (GO to question H.)
2. I attended just one session. (If course had only one session, circle response 4 below.)
3. I attended more than one session but not all sessions.
4. I attended all sessions of this course.

B. What was your primary goal in enrolling in this course? (Circle one)

1. Prepare for entry into first career
2. Prepare for entry into different career
3. Update skills for current job
4. Self-enrichment
5. Other (specify) _____

C. To what extent did this course meet your goal? (Circle one)

1. Completely 2. Mostly 3. Fairly well 4. A little 5. Not at all

D. Would you recommend this course to others with the same goal? (Circle one)

1. Yes
2. No
3. Not sure

E. Was this course taken to fulfill licensure or certification requirements?
(Circle one)

1. Yes
2. No

F. Did you satisfactorily complete all the course requirements for this course?
(Circle one)

1. Yes
2. No
3. Not applicable/course had no specific requirements

G. Did you earn continuing education units (CEUs) for completing this course?
(Circle one)

1. Yes
2. No
3. Not applicable/no CEU associated with course

H. How would you rate the quality of instruction in this course? (Circle one)

1. Very good
2. Good
3. Fair
4. Poor
5. Very poor

I. How would you rate the registration/payment procedures of enrolling in this course?
(Circle one)

1. Very good
2. Good
3. Fair
4. Poor
5. Very poor

J. What was your employment status at the time you took this course?
(Circle all that apply)

1. Employed full-time (35 or more hours per week)
2. Employed part-time
3. Unemployed and seeking a job
4. Unemployed and not seeking a job
5. Employed and seeking a different job
6. Retired
7. Other (specify) _____

K. What was the highest level of education you had achieved at the time you took this course? (Circle one)

1. Less than high school diploma or GED
2. High school diploma or GED
3. Some college credits/less than a degree or certificate
4. Community college certificate or degree
5. Bachelor's degree
6. Master's or first professional degree
7. Doctorate

L. How could the college improve its continuing education courses to better meet your needs?

THANK YOU for completing the survey! Please return in enclosed envelope.

METHODOLOGY

The State Board staff and the Outcomes Committee designed a questionnaire to answer the four research questions. Survey questions about work and education status were added to better understand continuing education students. To clarify questions about goals, questions about licensure and continuing education units (CEUs) also were included.

A. Study Population

The population of the study consisted of eligible students enrolled in State funded continuing education courses during FY 1987.

B. Sample

The State Board for Community Colleges (SBCC) selected a random sample of students from the FY 1987 end-of-year tape of continuing education registrants in State-funded courses. Sample size was 10 percent of unduplicated students enrolled in the following course intent areas: remedial, community development, consumer, health care/science, general interest, general education, and family life. A 20 percent random sample of unduplicated students enrolled in work-related areas (vocational/technical, licensure/certification, apprenticeship training, and business/industry training) also was selected by the SBCC. This stratified sample was used to ensure sufficient respondents in these two types of courses at each college. Respondents in the two groups of courses were weighted in the analyses to allow generalizations to all registrants in State-funded courses at each college.

C. Mailing

The SBCC provided each college with a list or tape of the Social Security number and course name of the records selected for the sample. Each college produced mailing labels for its sample. Printed questionnaires were provided by the SBCC. Each college composed its own cover letter to accompany the questionnaires. The letter assured the respondent of confidentiality, explained how the survey was to be used, and set a deadline for return. The letter also included the name and address of a college contact person to answer student questions about the survey.

Each college mailed and received questionnaires from its sample. As questionnaires were returned, respondents were checked off the sample master control list. Questionnaires returned by the postal service as undeliverable were marked off the list to determine an adjusted response rate.

Two weeks after the initial mail-out, a second complete packet was sent to all nonrespondents. The cover letter reflected that this was a second request and urged a prompt reply.

D. Data Entry

All completed questionnaires were returned to the SBCC. Survey responses were entered into the computer and data were merged with data tapes to determine demographic and course data for each student. Data elements from the end-of-year file used in the merge included age, race, sex, course intent, subject code, and special population.

E. Response Rate

The adjusted response rate statewide for the continuing education student survey was about 40 percent. (Table a. found in Appendix B) By college, the adjusted response rates ranged from 24 percent to 66 percent. The response rate for this survey is similar to follow-up surveys of credit students administered by the SBCC.

F. Analysis

College and statewide data were analyzed by the SBCC for this report. Questionnaires and data files were returned to each college for further analysis.

The results in this report are not actual numbers because of the different sample sizes. The 10 percent sample was weighted to allow comparisons of the different groups. A 20 percent sample of the work-related group was taken since many of the questions were related to this group and to ensure sufficient respondents in this group at all colleges.

Table b. (in Appendix B) shows comparisons of the weighted sample with the actual population of the work-related and general groups. Because students over age 60 had a higher response rate than younger students, colleges with large senior populations tended to have more discrepancies between the population and the weighted sample.

Forty-two percent of the total weighted sample were seniors. Many seniors are enrolled in courses designed especially for their needs which differ from content in other noncredit courses. The report takes these factors into consideration by analyzing the data with and without senior responses. The respondents from the survey were divided into three groups representing age and course intent differences:

1. Work-related. Students under 60 years of age enrolled in vocational/technical, business/industry, licensure/certification, and apprenticeship courses. (41 percent)
2. General. Students under 60 enrolled in non-vocational continuing education courses. (17 percent)
3. Seniors. Students aged 60 and above enrolled in continuing education courses. (42 percent)

Table a.
RESPONSE RATES

College	Sample	Nondeliverable	Total Responses	Unadjusted Response Rate	Adjusted Response Rate
Allegany	799	4	198	25%	25%
Anne Arundel	2,902	388	1,220	42	49
Baltimore	1,610	249	325	20	24
Catonsville	2,698	129	909	34	35
Cecil	289	26	107	37	41
Charles	648	9	289	45	45
Chesapeake	487	23	216	44	47
Dundalk	1,110	109	408	37	41
Essex	2,594	171	894	35	37
Frederick	500	16	150	30	31
Garrett	379	10	172	45	47
Hagerstown	670	225	292	44	66
Harford	1,046	31	439	42	43
Howard	1,234	62	533	43	46
Montgomery	1,443	239	492	34	41
Prince George's	2,550	195	1,017	40	43
Wor-Wic Tech	549	39	218	40	43
Statewide	21,508	1,925	7,879	37%	40%

Table b.

COMPARISON OF POPULATION AND WEIGHTED RESPONSES
BY TYPE OF COURSE

College	Population				Weighted Responses			
	Work-Related		General		Work-Related		General	
	#	%	#	%	#	%	#	%
Allegany	3,219	67%	1,554	33%	154	64%	88	36%
Anne Arundel	11,283	64	6,454	36	865	55	710	45
Baltimore	3,566	27	9,506	73	164	34	316	66
Catonsville	8,508	45	9,536	55	519	40	780	60
Cecil	623	27	1,650	73	55	35	104	65
Charles	2,417	59	1,665	41	212	58	154	42
Chesapeake	1,580	48	1,709	52	148	52	136	48
Dundalk	2,898	35	5,140	65	176	28	464	72
Essex	9,974	63	5,883	37	636	56	500	44
Frederick	1,300	45	1,586	55	98	49	104	51
Garrett	1,513	66	779	34	144	72	56	28
Hagerstown	2,393	59	1,636	41	200	52	184	48
Harford	2,641	34	5,262	66	267	44	340	56
Howard	4,319	54	3,729	46	321	43	424	57
Montgomery	4,659	48	5,066	52	314	47	350	53
Prince George's	8,599	50	8,547	50	564	38	906	62
Wor-Wic Tech	2,619	91	250	9	206	90	24	10
Statewide	72,111	50%	69,952	50%	5,043	47%	5,640	53%

Work-related. Students enrolled in vocational/technical, business/industry, licensure/certification, and apprenticeship courses.

General. Students enrolled in courses without a specific course intent of preparation for employment.